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ABSTRACT

A map of the field of higher education at the state level is presented that defines theoretical and conceptual frameworks, approaches to analysis, research designs, and methodologies that have been used in the study of the relationships between state governments and institutions of higher education or of state policy structures and processes. Sixty-eight research studies completed between 1970 and 1981 are analyzed and categorized as disciplinary or policy research as well as according to their implicit or explicit use of theory as explanation, as a principle of data selection, as description, or as prescription. This map provides a starting point for the development of cumulative knowledge about the ways theory has and has not been used as a basis for the study of higher education at the state level, or the use of theory in all higher education research. Eleven research studies were found that used theory as an explicit part of their effort to explain some aspect of higher education at the state level. All of these drew on concepts from economics but also incorporated organizational open systems theory derived from sociology, and some of the studies examined some aspect of the political or policy-making process. Twenty studies explicitly used theories and conceptual frameworks for the selection and interpretation of facts, and 17 were rooted in political science theories and concepts. Eleven studies were descriptive and provide information on the current status of state level organizational structures or practices, and do not explicitly use theoretical or conceptual frameworks for selecting information. Twelve studies conform closely to James Coleman's (1972) definition of policy research. Nine selections were classified as interpretive. A bibliography is appended. (SW)

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MAP OF THE FIELD - HIGHER EDUCATION RESEARCH AT THE STATE LEVEL

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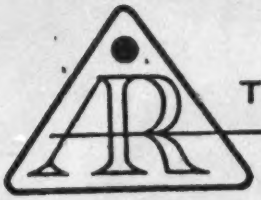

THE ASSOCIATION FOR INSTITUTIONAL RESEARCH

This paper was presented at the Twenty-Second Annual Forum of the Association for Institutional Research held at the Denver Hilton Hotel in Denver, Colorado, May 16-19, 1982. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum papers.

D. R. Coleman, Chairman
Forum Publication
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Abstract

The purpose of the paper is to contribute to our knowledge of the study of higher education at the state level by providing a "map of the field". This map defines theoretical and conceptual frameworks, approaches to analysis, research designs, and methodologies that have been used in the study of the relationships between state governments and institutions of higher education or of state policy structures and processes. Sixty-eight research studies completed between 1970 and 1981 are analyzed and categorized as disciplinary or policy research as well as according to their implicit or explicit use of theory as explanation, as a principle of data selection, as description, or as prescription. This map provides a starting point for the development of cumulative knowledge about the ways theory has and has not been used as a basis for the study of higher education at the state level. It also provides a method of analysis that can be used for the investigation of the use of theory in all higher education research.

Higher education, as a field of study with an exceedingly broad subject matter, is dependent on a large number of disciplines for its philosophical foundations, theories, concepts, methods and approaches. Those who have examined higher education as a field of study (Hobbes & Francis, 1973; Dressel and Mayhew, 1974; Fincher, 1977) agree that higher education research and scholarship is weak in that it lacks an adequate theoretical base and a sufficient concern with the production of knowledge. According to Fincher, "the field will not mature until its professionals develop a general body of knowledge, a specialized vocabulary, an accepted body of theory, established methods of inquiry and verification, and other markings of an academic discipline (1977, p. 2000)."

Theoretical development in any field is vexed by problems of definitions, shared assumptions and, most particularly, by the difficulty posed to practitioners of gaining access to a systematic analysis of the theoretical bases of their field when their immediate concerns lie with on-going problem solving research. Given the extensive amount of material produced by higher education research and the varied sources of that material, the kind of maturation of the field Fincher and others see as desirable cannot take place until some initial effort is made to organize and assess what has been done from a theoretical perspective. There has yet to be developed a systematic analysis of the use of theory in higher education research. We see such an analysis as an essential prerequisite to the development of a shared theoretical framework for higher education as a whole. This paper is an effort to move in that direction.

Realizing the enormity of the task involved in making an assessment of the theory at work in all of higher education research, we have chosen for purposes of this paper to limit our analysis to studies of higher education

at the state level. Our first intent is to provide a useable map of that sub-field that will bring into relief the theory, conceptual frameworks, methods and approaches employed by researchers in state higher education during the past decade. This map should provide a starting point for the development of cumulative knowledge about higher education at the state level. At the same time we will be developing a method of analysis that can be used for the investigation of all research in higher education. Ultimately we expect to be able to define the epistemological assumptions and structures of scientific theory which characterize studies in higher education.

We chose to focus on higher education at the state level because, in spite of the fact that the amount and quality of scholarly attention devoted to state higher education has increased during the last decade, there is reason to believe that it will receive even greater attention in the future. Both the Carnegie Council on Policy Studies in Higher Education (1980) and the Sloan Commission on Government and Higher Education (1980) have recommended increased scholarly attention to state higher education issues. There is also an increasing recognition in these reports, and more generally in the literature, that during the 1980's and 1990's the quality and, in many cases, the survival of public and independent colleges and universities will be affected by policies emanating from the state level.

Institutional researchers will contribute substantially to knowledge in the area of higher education at the state level as well as to the theoretical and methodological development of the field of higher education. Although much of their work is addressed to current issues and problems at the institutional rather than at the state level, they have the analytical and technical skills, occasionally the resources, and most importantly, the insights

based on experience, to make major contributions both to practical policy formulations and to the development of a theory for higher education.

Background, Design and Method for Map of State Higher Education Research

An enormous amount of attention has been devoted to the examination of the nature of scholarly inquiry and research. While it is impossible to survey all of this material within the confines of this paper, we are aware of three distinct strands of investigation which are germaine to the development of a full understanding of the theoretical foundations of higher education research, including research at the state level. The first includes work that is being done in the philosophy of science and particularly in the structure of scientific theories (Suppe, 1977). The second involves current developments in social theory, while the third includes work on the use of theory, concepts, methods and approaches to analysis in the social sciences. Political Science, Sociology and Economics are the three disciplines that have provided the primary sources for the construction of theoretical frameworks for research on higher education at the state level. Although macro or "grand" scientific and social theories are directly relevant to notions of truth, validity and knowledge in higher education research, these are typically avoided in favor of mid-range theories (Merton, 1965) in research on higher education at the state level.

Higher education researchers and scholars in the social science disciplines readily admit that their work rarely incorporates "pure" or concrete theories in the explanatory sense of a set of interconnected propositions or a system of valid hypotheses (Wallace, 1969 on Sociology; Issak, 1969 on Political Science; Frederickson, 1980 on Public Administration; and Fincher, 1977 on Higher Education). Instead, theories are often used in the more

general sense of theoretical or conceptual framework, combinations of concepts, assumptions and ideas that serve as aids to perception and that guide the selection and interpretation of facts (Issak, 1969). At the same time, the term "concepts" is variously used in research from the strictly-defined variable in a formal hypothesis, to the loosely defined tool for organizing a discussion (Goldman, 1972).

For the purposes of this paper, the distinctions made by James Coleman (1972) between "disciplinary research" and "policy research" are useful. According to Coleman, disciplinary research is intended primarily for the accumulation of knowledge and theory about a certain group of phenomena and thus for further development of the discipline. In contrast, policy research is intended to provide guidance for action and for policy development. Coleman's distinctions provide a means of categorizing research studies on higher education at the state level that illuminates their basic purpose. In addition to the use of Coleman's categories of disciplinary and policy research, we have adapted McNall's (1979) modification of Robert Merton's analysis of the functions of social theory. Thus, we have categorized all the research on higher education at the state level between 1970 and 1981 according to Coleman's distinctions as well as according to their implicit or explicit use of theory as explanation, as a principle of data selection, as description, or as prescription.

Category I includes disciplinary research in which theory is used as explanation. Studies in this group involve the explicit application of social science theory in order to provide a systematic understanding of the phenomenon under investigation. Usually, Category I studies also make an effort to contribute to theory development. Category II includes both disciplinary

and policy research in which theoretical concepts are used explicitly for selection and interpretation of facts. The results of these studies are both descriptive and analytic. Typically, they are intended to contribute to a more thorough and precise understanding of the phenomenon under investigation. Category III includes policy research in which concepts are used as a means of organizing the material under investigation. The intention in these studies is to provide descriptions of current patterns and practices, not to explain. Category IV includes policy research which is primarily prescriptive. Theory or theoretical concepts are not used explicitly in these studies but data is gathered, analyzed and presented in support of recommendations for public policy. Category V includes a selected group of essays which cannot be classified as research or related to any but the broadest definitions of theory, but which provide commentary on important issues and problems by individuals with extensive research and personal experience in higher education at the state level. While not research studies, they are included because they contribute in important ways to shaping the research agenda in this area.

As is common in classification schemes, it was occasionally necessary to force some studies into a single category when they in fact occupied some middle ground between categories. We freely grant that this categorization is subject to refinement, that it does not necessarily probe deeply, and that it contains the possibility of distorting or not fully accounting for aspects of the research under analysis. Nevertheless, arranging the research literature according to these categories does provide a useful map of some of the ways theory and method have been used in research on higher education at the state level.

We used the research method of a detailed literature review as the basis for this study. From the voluminous literature on higher education we utilized sixty eight studies for analysis. We tried to locate and include in Categories I, II, and III, all research studies completed subsequent to 1970, and to select, based on scope of the effort and influence in the field, the most significant for Categories IV and V. The selection decisions were necessarily subjective and based on work and experience in the area. Many interesting studies predated 1970 but were not included in the map because of constraints on time and volume of material.

Three reviews of the literature subsequent to 1970 on policy and/or politics of higher education include specific material on the state level (Gove and Floyd, 1975; Hines and Hartmark, 1980; and Stauffer, 1976). A recent article by Gove and Stauffer (1981) provides a list of issues and concerns for priority attention on the higher education policy research agenda. All four sources not only provided guidance on sources and influenced our thinking about directions for research and study but also contributed to the conviction that a different kind of review, a map explicitly oriented toward theory and methodology, would add to the work already done in this area. In addition to the reviews, many ERIC (CIJE and RIE) searches, including a very broad strategy capturing more than 1,000 items, were used to locate the journal and fugitive literature in the field. Despite the efforts to locate sources for this paper, it is possible that some studies of higher education at the state level may have been missed and apologies are extended to those whose work was omitted by mistake.

Once identified, each of the sixty-eight studies was reviewed in detail and a record was made of the major focus or purpose of the study, the theoretical or conceptual framework, method, approach, data sources and the

nature of the contribution to the development of theory and method in the area. These notes constituted the raw data from which the summaries in the next section were prepared. The summaries are presented by category and include a listing of the studies covered and descriptions of theoretical framework, method and approach. A number of conclusions and observations concerning research on higher education at the state level are included at the end of the section. All studies are listed chronologically by category in the references.

Research on Higher Education at the State Level

Category I - Theory as Explanation - Theoretical Framework

We found eleven research studies which use theory as an explicit part of their effort to explain some aspect of higher education at the state level. In these studies theory was drawn primarily from Economics, Political Science and Sociology. Often, for a given study, theories from more than one of these desciplines were used in combination. Four of the eleven studies sought both to utilize budgeting theory as a basis for analysis and to contribute to the development of new theory. All drew on concepts from Economics but also incorporated organizational open systems theory derived from Sociology. All four were part of the study of state budgeting conducted under the leadership of Lyman Glenny under the auspices of the Center for Research and Development in Higher Education (Glenny, 1976; Meisinger, 1976; Purves and Glenny, 1976; and Schmidtlein and Glenny, 1977). Another of the eleven studies examined state budgeting but in this case from a comparative input/output policy analytic perspective (Peterson, 1976); while yet another used the economic concept of elasticity to examine the effect of business cycle fluctuations on state revenue and state appropriations for higher

education (White and Musser, 1978). The remainder of the studies looked at some aspect of the political or policy making process--planning, structure, governance, coordination, policy formulation and implementation--utilizing theories and conceptual frameworks from Sociology and/or Political Science: interorganizational networks (Palola, Lehmann and Bliske, 1970); conflict analysis (Smelser, 1974); analytical models of government (Epstein, 1974); political role/leadership (Rosenthal and Fuhrman, 1981); and implementation theory (Greer, 1981).

Method and Approach

Five of the eleven research reports were based on case studies conducted in a number of states (5-50). Each used comparative analysis as a basis for generalizations (Palola et al, 1970; Glenny, 1976; Meisinger, 1976; Purves and Glenny, 1976; and Schmidtlein and Glenny, 1977). Three additional studies also used the case study approach. However, these concentrated on an in-depth analysis of one particular state or case example (Epstein, 1974; Smelser, 1974; Greer, 1981). All eight case studies relied on narrative presentation of variables. Of the remaining three in this category, two studies used statistical techniques of correlation and regression analysis and time series analysis to examine variables (Peterson, 1976; White and Musser, 1978); while one constructed an index for the measurement and analysis of variables (Rosenthal and Fuhrman, 1981).

Category II - Theoretical Concepts Used for Selection and Interpretation - Theoretical Framework

The twenty studies in Category II include those which explicitly use theories and conceptual frameworks for the selection and interpretation of facts. Of the twenty studies, seventeen were rooted in Political Science

theories and concepts. These sought to examine and describe some aspect of the state level political process affecting higher education:

a) ten focused on interorganizational relationships, the relationships between governmental entities and institutions of higher education, or the relationships among constituent groups using concepts of political systems, influence patterns, constituent interests, autonomy, and academic freedom (Tucker et al, 1973; Murray, 1976; Glenny and Bowen, 1977; Stampen, 1978; Marcus and Hollander, 1981; Folger, 1980; Berdahl, 1971; Stafford and Lustberg, 1978; Kershaw, 1978; Dressel, 1980).

b) three examined attitudes and behaviors of political actors--governors, legislators, and lobbyists--toward higher education (Eulau and Quinley, 1970; Budig, 1977; Gove and Carpenter, 1977).

c) three examined the distribution of authority patterns within political systems (Adamany, 1979; Muller and others, 1979; Mortimer and Johnson, 1976).

d) one analyzed structural patterns and conflicts over structure (Floyd, 1979).

Of three remaining studies in Category II, one used sociological theories of stratification and elitism and focused on 1202 commission membership (Salazar and Martorana, 1978); one utilized communications theory for an examination of the flow of information and opinions from institutions to legislators (Lepchenske, 1977); while the last employed management theory for a study of institutional efficiency resulting from state regulations (Harcleroad, 1975).

Method and Approach

Of the twenty studies, fourteen used mailed questionnaires or interview

techniques to acquire their data. Of these, eight elicited responses from more than one state in order to arrive at conclusions or develop generalizations that were not limited to one state system (Salazar and Martorana, 1978; Eulau and Quinley, 1970; Mortimer and Johnson, 1976; Budig, 1977; Lepchenske, 1977; Muller and Others, 1979; Glenny and Bowen, 1977; Berdahl, 1971). Six of the fourteen involved analysis and generalization from one particular state situation (Stafford and Lustberg, 1978; Kershaw, 1978; Adamany, 1979; Tucker et al, 1973; Floyd, 1979; Stampen, 1978). Five other studies relied exclusively on studies reported in the literature for their data base (Dressel, 1980; Folger, 1979; Murray, 1976; Gove and Carpenter, 1977; Marcus and Hollander, 1981). Only one study sought to provide trend analysis through comparative examination of variables at two points in time (Harcleroad, 1975).

Category III - Theory as Description - Theoretical Framework

The eleven studies in Category III are descriptive and seek to provide information on the current status of state level organizational structures or practices in order to compare patterns across the states in a variety of areas. In contrast to the studies in Category II, studies in this group do not explicitly use theoretical or conceptual frameworks for selecting information. In all cases, however, it is possible to infer a systems view of higher education at the state level. Rather than examine or test the validity of this theoretical framework, these researchers tend to adopt its assumptions as a convenient means of pursuing questions that interest them. As a consequence the studies in this category have been arranged according to the general topic each is addressing rather than according to theoretical orientation. Regardless of specific variations from study to study, the theory at work here is deeply embedded and subservient to non-theoretical concerns. The topics include:

a) coordination (Millard, 1976; 1980)

b) planning (Folger, 1979; Chronister, 1978; Halstead, 1974)

c) program review (Barak and Berdahl, 1978; Green, 1981)

d) independent institutions (Florida Postsecondary Education Commission, 1978; Odell and Thelin, 1981)

e) appropriations (Chambers, 1974)

f) management information systems (Barak, 1975)

Method and Approach

Five of the eleven studies use survey methods for gathering information in order to make comparisons from state to state (Chambers, 1974; Odell and Thelin, 1981, Barak and Berdahl, 1978; Chronister, 1978; Barak, 1975). Four of the studies rely on information already available in the literature (Folger, 1979; Millard, 1976 and 1980; Green, 1981). A conference report (Florida Postsecondary Education Commission, 1978) which included commissioned papers and a handbook (Halstead, 1974) combined both survey and literature methods.

Category IV - Theory as Prescription - Theoretical Framework

This grouping includes twelve studies which conform closely to Coleman's definition of policy research, that is, research that is intended to provide guidance for action and for policy development. The twelve studies in this category share a number of theoretical assumptions and perspectives; (1) they perceive higher education at the state level as an interactive system; (2) they assume the importance of public policy as it affects higher education; (3) they are concerned with the nature of the relationships between institutions and systems of higher education.

All twelve studies share a broad policy analysis approach that is

characterized by a description of a situation, the identification of current and future problems, the identification and analysis of alternative policy options and the recommendation of a preferred course of action based upon this analysis. In each case the preferred solution is highly pragmatic, emphasizes effective rather than affective ends, and is based upon a view of the world which reinforces the status quo.

In spite of their common features, these studies vary considerably in terms of the focus of their analysis, the amount of attention given to the analysis of alternatives, and the scope of their recommendations.

Seven of the studies in this category represent the work of five different commissions or councils which have concerned themselves with state higher education over the last decade (Carnegie Commission on Higher Education, 1971 and 1973; Carnegie Foundation for the Advancement of Teaching, 1976; Carnegie Council for Policy Studies in Higher Education, 1980; the Education Commission of the States, 1973 and 1980; and the Sloan Commission on Government and Higher Education, 1980). All of these are broad in scope covering structure, governance, planning, coordination, and finance. One additional study is also broad in its scope but is the work of a group of scholars in the area (Glenny, Berdahl, Palola, and Paltridge, 1971). The other four prescriptive studies are more narrow in scope, focusing on planning (Wattenbarger and Bender, 1974), regulation (Hook, 1978), evaluation of coordinating boards (Berdahl, 1975) and the relationships between independent institutions and state government (Breneman and Finn, 1978).

Method and Approach

Seven of the studies, all those of the commissions and councils, are based on "factual" material prepared and gathered by staff and/or on

commissioned studies, while four rely on contributed papers or chapters by experts in the area (Wattenbarger and Bender, 1974; Berdahl, 1975; Breneman and Finn, 1978; Hook, 1978). The Glenny et al (1971) study relied on the prior research of all four authors.

Category V - Theoretical Framework - Method and Approach

The nine pieces in Category V might best be classified as interpretive. They were selected from an extensive literature of commentary, essays, and speeches on higher education at the state level. They were selected because their authors are recognized as prominent leaders in higher education whose comments and views help shape attitudes and define the future research agenda. They are not distinguished by their use of theory or research methods.

Of the selections, five address the new realities of higher education and the implications for statewide coordination and planning (Berdahl, 1975; Kerr, 1980; Millett, 1978; Magrath, 1980; Weathersby, 1980). Four are concerned with specific difficulties and problems of institutions of higher education and/or state level bodies that result from changes at the state level in areas of structure (Sample, 1974), the public interest (Enarson, 1975), proliferation of planning agencies (Glenny, 1975), and state-institutional relationships (Millard, 1978). One commentary emphasizes the complex, societal and political forces affecting statewide coordination (Weathersby, 1980). Two strike a more positive note and stress the affirmative goals of state coordination (Kerr, 1980) or the opportunities for mutual understanding and a closer "state connection" (Magrath, 1980).

Conclusions

1. Most of the research on higher education at the state level can be categorized as policy research rather than disciplinary research.

2. Research at the state level which utilizes theoretical frameworks draws these from the Social Sciences--most particularly, Sociology, Economics and Political Science. In this sense higher education is derivative.
3. There is very little disciplinary research which strives for explanation or systematic examination of higher education on the state level on the basis of theory.
4. Researchers on higher education at the state level have not sought to test theory in their studies.
5. Research which utilizes theory as explanation relies on theories from Economics and to a lesser extent, Sociology.
6. Research which utilizes theoretical frameworks for the selection and interpretation of facts derives these primarily from Political Science, and to a lesser extent, Sociology.
7. Much of the descriptive research on higher education at the state level uses very broad and often ill-defined concepts as a means of organizing information rather than theoretical frameworks.
8. Many research studies combine theories from more than one discipline--(e.g., Economics and Sociology, the policy sciences). This fact highlights the interdisciplinarity of higher education as a field of study.
9. While much of the research on higher education at the the state level can be categorized as policy research, there is little explicit discussion of theories and methods for policy analysis.
10. Case studies predominate as the most popular approach to the study of higher education at the state level. Some are state and issue specific and take little note of issues of generalizability but the majority are designed to provide comparative information across states.
11. More recent research includes more quantitative approaches to the study

of higher education at the state level.

Observations

Throughout the preceeding categorization and analysis of theories at work in studies of higher education, we have deliberately avoided attempting to come to grips with what Stephen Bailey called "assumptive theory". That is, propositions which articulate root assumptions about the nature of man and the tractability of institutions (Bailey, 1968). In the studies we examined, such theory is notable by its absence. On the other hand, ontological and epistemological concepts are at work without being either identified or named. What is one to make of this state of affairs? What kind of knowledge is it that is sought in higher education? How does the research engaged in by those who study higher education help us make sense of things or contribute to an understanding of the way we should conduct our lives?

These questions, and others like them, stem from an assumption that the study of higher education necessarily involves the study of social institutions. From this it follows that higher education theory entails social theory. If we are to explain and to predict, we need to develop a study of literature that raises systematic questions, in dialogue with other disciplines, about the philosophical status of our work whether we see it as social, scientific or both.

REFERENCES

(The reference list is organized according to the system of categories developed in this paper. References are listed chronologically by category. All other references are listed alphabetically.)

CATEGORY I

Palola, E. G., Lehmann, T., Bliske, W. R. Higher education by design: The sociology of planning. Berkeley: Center for Research and Development in Higher Education, 1970.

Epstein, L. D. Governing the university. San Francisco: Jossey Bass, 1974.

Smelser, N. J. Growth, structural change, and conflict in California public higher education, 1950-1970. In N. J. Smelser & G. Almond (Eds.) Public higher education in California. Berkeley: University of California Press, 1974.

Glenny, L. A. State budgeting for higher education: Interagency conflict and consensus. Berkeley: Center for Research and Development in Higher Education, 1976.

Meisinger, R. J. State budgeting for higher education: The uses of of formulas. Berkeley: Center for Research and Development in Higher Education, 1976.

Purves, R. & Glenny, L. A. State budgeting for higher education: Information systems and technical analysis. Berkeley: Center for Research and Development in Higher Education, 1976.

CATEGORY I (cont'd)

Peterson, R. G. Environmental and political determinants of state higher education appropriations policies. Journal of Higher Education, Vol. 47, 1976, pp.523-533.

Schmidtlein, F. A. & Glenny, L. A. State budgeting for higher education: The political economy of the process. Berkeley: Center for Research and Development in Higher Education, 1977.

White, F. C. & Musser, W. N. Business cycles and state governmental finances: Implications for higher education. Higher Education 7 (1978), pp. 177-192.

Greer, D. G. State-level coordination and policy implementation. Policy Studies Journal, Vol. 10, No. 1, September, 1981, pp.32-47.

Rosenthal, A. & Fuhrman, S. Higher education leadership in state legislatures. Policy Studies Journal, Vol. 10, No. 1, September, 1981, pp. 47-59.

CATEGORY II

Eulau, H. & Quinley, H. State officials and higher education: A survey of the opinions and expectations of policy makers in nine states. New York: McGraw Hill, 1970.

Berdahl, R. O. Statewide coordination and higher education. Washington, D.C.: American Council on Education, 1971.

Tucker, J. B.; Gove, S. K.; Floyd, C. E.; McKibben, C. R.; Rosenbaum, A. The politics of public higher education. AAUP Bulletin, Vol 59, No. 3, September, 1973, pp. 286-323.

CATEGORY II (cont'd)

Harcleroad, F. F. & others. Institutional efficiency in state systems of public higher education. Washington, D. C.: American Association of State Colleges and Universities, 1975. ED119567.

Mortimer, K. P. & Johnson, M.D. Faculty collective bargaining in public higher education. Educational Record, Vol. 57, No. 1, 1976, pp.34-44.

Murray, M. A. Defining the higher education lobby. Journal of Higher Education, Vol. 47, No. 1, Jan/Feb, 1976, pp. 79-92

Glenny, L. A. & Bowen, F. M. State intervention in higher education. Paper for Sloan Commission on Government and Higher Education. Cambridge, MA, November, 1977, ED 184427.

Lepchenske, G. L. Utility of higher education information to legislators in ten Southeastern states. Paper prepared for a conference on The State Legislative Process and Higher Education, University of Arizona, 1977. ED148253.

Budig, G. A. Gubernatorial opinion of higher education. Educational Record, Vol. 58, No. 4, Fall, 1977, pp.373-377.

Gove, S. K. & Carpenter, J. State lobbying for higher education. Educational Record, Vol. 58, No. 4, Fall, 1977, p. 357-372.

Salazar, L. J. & Martorana, S. V. State postsecondary education planning commissions: A first look. University Park, PA: Center for the Study of Postsecondary Education, Pennsylvania State University, 1978.

Stafford, R. & Lustberg, L. Higher education in Massachusetts: Issues in their context. State study prepared for the Sloan Commission on Government and Higher Education, Fall, 1978 (revision, March, 1979).

CATEGORY II (cont'd)

Kershaw, J. A. Government and higher education in New York state. State study prepared for the Sloan Commission on Government and Higher Education. (No date-c. Fall, 1978)

Stampen, J. O. Conflict, accountability and the Wisconsin idea: Relations between government and higher education in Wisconsin, 1965 to 1978. State study prepared for the Sloan Commission on Government and Higher Education, November, 1978 (updated December, 1979).

Adamany, B. Government, quality programs and effective resource use in higher education. Paper prepared for the University of Southern California Annual Academic Planning Conference, 1979. ED176690

Floyd, C. E. Conflict between the state coordinating board and the principal state university: Illinois during rapid higher education growth. Paper delivered at 1979 Annual Meeting of the Association for the Study of Higher Education, 1979. ED174182.

Muller, J. & others. The Governor's role in education: An information overview. Denver: Education Commission of the States, 1979.

Dressel, P. L. The autonomy of public colleges. New Directions for Institutional Research, Vol. 7, No. 2, 1980, pp. 1-100.

Folger, J. K. Implications of state government changes. In P. Jedamus, M. Peterson (Eds.), Improving Academic Management. San Francisco: Jossey Bass, 1980.

Marcus, L. R. & Hollander, T. E. The capital (sic) and the campus--Each in its proper place. Policy Studies Journal, Vol. 10, No. 1, Sept., 1981, pp. 19-32.

CATEGORY III

Chambers, M. M. Higher education and state governments. Danville, IL: Interstate Printers and Publishers, 1974.

Halstead, D. K. Statewide planning in higher education. Washington, DC: U. S. Government Printing Office, 1974.

Barak, R. J. State level management information systems for higher education: A survey summary. Des Moines, Iowa: State Board of Regents, 1975. ED122696

Millard, R. M. State boards of higher education. ERIC/AAHE Research Report, Washington, DC: American Association for Higher Education, 1976.

Barak, R. J. & Berdahl, R. O. State-level academic program review in higher education. Denver: Education Commission of the States, 1978.

Florida Postsecondary Education Commission. State policy and post-secondary education: The relationship of the independent and public sectors. A report of a statewide conference, 1978. Tallahassee: Department of Education, 1978.

Chronister, J. L. Independent college and university participation in statewide planning for postsecondary education. An occasional research report. Washington, DC: National Institute of Independent Colleges and Universities, 1978. ED165684

Folger, J. K. Governance and coordination. In D. Halstead (Ed.) Higher education planning: A bibliographic handbook. Washington, DC: U. S. Government Printing Office, 1979.

CATEGORY III (cont'd)

Millard, R. M. Power of state coordinating agencies. In P. Jedamus, M. Peterson (Eds.), Improving Academic Management. San Francisco: Jossey Bass, 1980.

Green, K. C. Program review and state responsibility for higher education, Journal of Higher Education, Vol. 52, No. 1, Jan/Feb, 1981, pp. 67-80.

Odell, M. & Thelin, J. Bringing the independent sector into statewide higher education planning. Policy Studies Journal, Vol. 10, No. 1, September, 1981, pp. 59-70.

CATEGORY IV

Carnegie Commission on Higher Education. The capitol and the campus. New York: McGraw Hill, 1971.

Glenny, L.; Berdahl, R.; Palola, E.; Paltridge, J. Coordinating higher education for the 70's. Berkeley: Center for Research and Development in Higher Education, 1971. ED057752.

Carnegie Commission on Higher Education. Priorities for action: Final report of the Carnegie Commission on Higher Education. New York: McGraw Hill, 1973.

Education Commission of the States. Coordination or chaos? Report of the task force on coordination, governance and structure of post-secondary education. Denver, CO: Education Commission of the States, 1973. ED093239.

Wattenbarger, J. & Bender, L. (Issue Eds.) New directions for higher education: Improving statewide planning. No. 8, Winter, 1974. San Francisco: Jossey Bass, 1974.

CATEGORY IV (cont'd)

Berdahl, R. O. (Issue Ed.) Evaluating statewide boards. New directions for institutional research, No. 5, Spring, 1975.

Carnegie Foundation for the Advancement of Teaching. The states and higher education. San Francisco: Jossey Bass, 1976.

Breneman, D. W. and Finn, C. E., Jr. (Eds.) Public policy and private higher education. Washington, DC: The Brookings Institution, 1978.

Hook, S. & Todorovitch, K. (Eds.) The university and the state. Buffalo: Prometheus Books, 1978.

Carnegie Council on Policy Studies in Higher Education. Three thousand futures. San Francisco: Jossey Bass, 1980.

Sloan Commission on Government and Higher Education. A program for renewed partnership. Cambridge: Ballinger, 1980.

Education Commission of the States. Challenge: Coordination and governance in the 80's. Denver, CO: Education Commission of the States, 1980. ED194019.

CATEGORY V

Sample, S. B. Reflections on statewide coordination. Remarks to the Nebraska Association of Colleges and Universities, Concordia Teachers College, Seward, NE, December, 1974. ED122707.

Berdahl, R. O. The state of state planning, coordination and governance. Atlanta: Southern Regional Education Board, 1975. ED119577.

Enarson, H. L. The occasional search for the public interest. AGB Reports, March/April, 1975.

CATEGORY V (cont'd)

Glenny, L. A. Coordination and planning despite competition and confusion. New Directions for Institutional Research, No. 6, Summer, 1975, pp. 13-22.

Millard, R. M. The state and higher education. Paper presented at the National Conference on the Impact of Government on American Higher Education, 1978. ED155970.

Millett, J. D. State level policy issues and planning problems resulting from fluctuating enrollments. In Higher education and the 1980's: Three planning papers. Washington, DC: Academy for Educational Development, 1978, pp. 15-30. ED154765.

Kerr, C. Coordination in a changing environment. Change. Vol. 12, No. 7, October, 1980, pp. 19, 53-56.

Magrath, C. P. The state connection. Educational Record. Vol. 61, No. 4, Fall, 1980, pp. 68-71.

Weathersby, G. Countervailing forces affecting coordination. Change, Vol. 12, No. 7, October, 1980, pp. 18, 20-24.

OTHER REFERENCES

Bailey, S. K. Objectives of the theory of public administration. In J. C. Charlesworth (Ed.), Theory and practice of public administration: Scope, objectives, and methods. Philadelphia: American Academy of Political and Social Science, 1968.

Coleman, J. S. Policy research in the social sciences. Morristown, NJ: General Learning Press, 1972.

Dressel, P. L. & Mayhew, L. B. Higher education as a field of study. San Francisco: Jossey Bass, 1974.

Fincher, C. Higher education (field of study). In A. Knowles (Ed.), The International Encyclopedia of Higher Education. Vol. 5, pp. 1998-2000. San Francisco: Jossey Bass, 1977.

Frederickson, H. G. New Public administration. University, AB: University of Alabama Press, 1980.

Goldman, R. M. Contemporary perspectives on politics. New York: Van Nostrand-Reinhold, 1972.

Gove, S. K. & Floyd, C. E. Research on higher education administration and policy: An uneven report. Public Administration Review, Vol. 35, No. 1, Jan/Feb, 1975, pp. 111-118.

Gove, S. K. & Stauffer, T. M. The higher education policy research agenda. Policy Studies Journal, Vol. 10, No. 1, September, 1981, pp. 10-18.

Hines, E. R. & Hartmark, J. S. Politics of higher education. AAHE/ERIC Research Report No. 7. Washington, DC: American Association for Higher Education, 1980.

Hobbs, W. C. & Francis, J. B. On the scholarly activity of higher educationists. Journal of Higher Education, Vol. 44, No. 1, 1973, pp. 51-60.

Isaak, A. C. Scope and methods of political science. Homewood, IL: Dorsey Press, 1969.

McNall, S. G. Theoretical perspectives in sociology, New York: St. Martin's Press, 1979.

Merton, R. K. Social theory and social structure. Glencoe, IL: The Free Press, 1957.

OTHER REFERENCES (cont'd)

Reading, H. F. A dictionary of the social sciences. London: Routledge and Kegan Paul, 1977.

Stauffer, T. M. Higher education policy. Policy Studies Journal, Vol. 8, No. 3, Winter, 1976, pp. 462-469.

Suppe, F. (Ed.) The structure of scientific theories. (2nd. Edition) Urbana: University of Illinois Press, 1977.

Wallace, W. L. Sociological theory: An introduction. Chicago: Aldine Publishing Company, 1969.